

Box Elder Creek Arch Bridge
Spanning Former Channel of South Fork
of Box Elder Creek
Mantua vicinity
Box Elder County
Utah

HAER No. UT-65

HAER
UTAH
2-MANT.V,
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Rocky Mountain Regional Office
National Park Service
U.S. Department of the Interior
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Denver, Colorado 80225

HISTORIC AMERICAN ENGINEERING RECORD

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Box Elder Creek Arch Bridge

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I. INTRODUCTION

Location: Spanning a former channel of the South Fork of Box Elder Creek
Mantua vicinity, Box Elder County, Utah

UTM: 12.420200.4594300
Quad: Mantua, Utah

Date of Construction: 1912

Present Owner: United States Forest Service

Present Use: Abandoned

Significance: The Box Elder Creek Arch Bridge represents a very early example of reinforced concrete bridge construction and, perhaps, the only remaining example of a closed spandrel deck arch bridge in Utah. The bridge was built by local labor under the supervision of Peter N. Pierce, Box Elder County Road Commissioner. Pierce also supervised the construction of the first concrete road in Utah between Tremonton and Garland in 1912.

Historian: Michael R. Polk
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March 1992

II. HISTORY

A. NEED FOR BRIDGE

The Wasatch Mountains, a major mountain range coursing north-south through the northern and central parts of Utah, are high and rugged, especially along the eastern side of the Salt Lake Valley. In this area, known as the "Wasatch Front", there are few adequate transportation corridors providing access through the mountains to the east. The Provo River, Ogden River and Weber River Canyons are the most important corridors along most of the Wasatch Front. However, Box Elder Canyon is the only available access route for 50 miles north of Ogden. As a result, this corridor to the Cache Valley and points beyond was a passage well-traveled by native Americans, fur trappers and explorers long before the settlement of the area by Mormon pioneers in the late 1840s.

The first documented European-American use of the route was by fur trapper and explorer Jedediah Smith in 1827 in conjunction with a fur trappers' "Rendezvous" at nearby Bear Lake.¹ Though not specifically documented, the activities of other fur trappers in this area during the 1820s, 30s and 40s strongly suggest that Box Elder Canyon was used as a route of travel by others as well. In August of 1847 a small party of Mormon men from the newly settled Salt Lake Valley area traveled through Box Elder Canyon during a scouting mission of the Cache Valley. The men entered Cache Valley by way of the Bear River, but returned to Salt Lake in the fall through Sardine and Box Elder Canyons.²

Over the next few decades the Box Elder Canyon passage became more frequently traveled. Howard Stansbury, a U.S. government surveyor, traversed the canyon in 1849 and provided the first detailed observations of the passage.³ Stansbury indicated that Box Elder Canyon was not suitable for wagon traffic at that time. However, the route became much improved after the 1851 settlement of Box Elder Village (later to become Brigham City). The settlers' need to graze their stock prompted them to establish a herd ground in Little Valley (site of the town of Mantua), which is located four miles east of Box Elder Village.⁴ The frequent use of Box Elder Canyon as an access route to Little Valley necessitated regular canyon road improvements and upkeep.

The vital importance of this transportation artery was reinforced with the initial settlement of nearby Cache Valley to the northeast. In 1855 there was an attempt by Mormon settlers to establish a piece of property known as Elkhorn Ranch in the southern end of Cache Valley. A group of men moved 2,500 cattle through the Box Elder Canyon passage in the early summer of that year and then were forced to move the herd back through the canyon that fall when heavy snow fell at the ranch.⁵ The year 1856 marked the first permanent settlement of the Cache Valley when the Peter Maughan party used the canyon route in their migration from Salt Lake City.⁶ That same year Cache County was created, resulting in the first organized efforts to upgrade the Box Elder-Sardine Canyon passage.

The first government-sponsored road building program in the canyon occurred during the early 1860s when the Utah Territorial Legislature provided funds for building a wagon road through Box Elder Canyon to Wellsville in the Cache

Valley.⁷ This wagon road took on considerable importance for the people of Cache County as evidenced by their construction of a "traveler's station" about five miles north of Mantua near Dry Lake. This station was used by travelers as an overnight stop during their journeys from Brigham City through the mountains to Wellsville.⁸

The Utah Territorial government lost interest in the construction and maintenance of wagon roads after 1869. By this time the transcontinental railroad was in place and local railroad operations provided access to many of the larger towns and cities of the territory. From the late 1870s until after Utah achieved statehood in 1896, the construction and maintenance of wagon roads was considered a local responsibility of the counties and cities.⁹ Though this decision had profound effects upon the condition of many roads in the territory, it did not adversely affect the Box Elder Canyon route as there continued to be a great deal of local interest in its upkeep. Much of this upkeep came as the result of strong ties which were maintained between Brigham City and Mantua, a small town located at the head of Box Elder Canyon. Mantua was settled by 17 Danish families by way of Brigham City in 1863.¹⁰ Through traffic to Cache Valley continued to be important on this route as well. Such interest was evidenced by Cache County's funding of a survey of the route for upgrading in 1882.¹¹

When Utah was granted statehood in 1896 some attention was again given to roads. However, only minor appropriations were made until the problems posed by a lack of statewide coordination of road construction and maintenance could be solved. These problems were not properly addressed until the legislature created the State Road Commission in 1909.¹² It was 1910, however, before any real headway in appropriations and significant movement on construction projects took place. In that year a very small network of state roads was designated linking key cities of Utah.¹³ The road from Brigham City to Logan through Box Elder Canyon and on to Idaho was part of this initial system. This designation made state funding for upgrading and maintenance of these roads easier since they were officially recognized by the state as part of the core road system.

As part of the road building program in Utah, there was often an accompanying need to construct bridges where the roads crossed creeks and rivers. In Box Elder Canyon this need was especially great because the narrow passage restricted potential road grade locations and forced road builders to cross Box Elder Creek many times within a few miles. Each of these crossings required an adequate structure to span the watercourse.

Prior to the turn-of-the-century, structures built to cross waterways were generally made of wood, though steel was used where heavier loads were carried or long spans were necessary. Wood was usually preferred because it was cheaper, more readily available, and easier to use than steel. Also, lumber mills were common throughout much of the western United States, including Utah, and there were many locally available craftsmen familiar with construction of wooden structures. Despite these advantages, wood had a number of drawbacks as bridge building material. It was more fragile, and was subject to more rapid deterioration than steel. Wooden bridges were also unable to carry the heavy loads possible with steel bridges, and they did not withstand floodwaters as well.

Like steel, concrete reinforced with steel was also superior to wood in many ways, but it was not an option for bridge building until the 1890s when it was perfected as a construction material.¹⁴

Bridge construction in Box Elder County was no exception to the pattern followed elsewhere in Utah. Until 1911 all bridges in the canyon were constructed of wood and were replaced as necessary, usually about every seven years.¹⁵ In late January, 1911, however, a combination of heavy rains and melting snow created exceptionally high waters on Box Elder Creek destroying all bridges and much of the road.¹⁶ This same destruction occurred in other areas of the county. The severity of the flooding was not realized until early February when State Road Commissioner P.N. Pierce reported to the Box Elder County Commissioner that 26 crossings on creeks and rivers in the county were impassable due to the recent floods.¹⁷ The estimated bridge loss in the county was between \$40,000 and \$68,000¹⁸ prompting the Box Elder County Commissioners to seriously consider construction of concrete bridges, particularly in Box Elder Canyon.¹⁹ The permanence, strength and loading capacity of concrete bridges were probably the major considerations in this decision. However, the recent opening of an Ogden Portland Cement Company facility near Brigham City in 1909 must also have encouraged the choice.²⁰ Prior to that time the nearest commercial manufacturer of cement was at Devil's Slide near Morgan, Utah, a distance of 45 miles from Brigham City. The prospect of receiving state contributions for the repair and reconstruction of state designated roads may have also encouraged the commissioners to consider more permanent bridge alternatives along the Box Elder-Sardine Canyon Road. Limited state appropriations were available for construction work following the creation of the State Road Commission in 1909.

B. BRIDGE CONSTRUCTION HISTORY

The loss of a large number of bridges in Box Elder County during the floods of January 1911 prompted the county commissioners to begin restoration of the county's transportation network. This effort, initiated with solicitation for concrete bridge plans in March 1911, appears to have continued until late 1912 when the last of the flood-destroyed bridges in Box Elder Canyon was rebuilt.²¹ At least four concrete arch bridges were constructed in the canyon during this time, although the precise locations and construction histories of several of these bridges, including the one of concern in this study, are not certain. However, the probable builder and date of construction for the Box Elder Creek Arch Bridge have been determined from available historical data.

In order to raise the money necessary to reconstruct roads and bridges ravaged by floods the county commissioners held a bond election in 1911. The election for a \$200,000 bond for "good roads" was held on April 23, 1911, but was turned down by bond buyers on a technicality.²² This severely restricted construction efforts during 1911, though the county apparently felt it was necessary to proceed with the construction of at least one concrete bridge. They instructed the commissioners' clerk on April 4, 1911 to advertise for bids for a 20-foot steel and a 20-foot concrete bridge across Box Elder Creek in Box Elder Canyon and a 700-foot concrete retaining wall in the canyon to protect the power plant.²³ In early May 1911, a contract

was awarded to the Wheelwright Construction Company of Ogden for construction of a concrete bridge at the mouth of Box Elder Canyon for the sum of \$857.85.²⁴ Whether money was found during the remainder of 1911 to construct other bridges in the canyon is not clear. However, reference to proposed construction of two other concrete bridges in Box Elder Canyon in 1911 was found in newspaper accounts.²⁵ The plans to construct these bridges may have come from one of several contractors who approached the county commissioners in February and March 1911 with offers to draw up plans for both steel and concrete bridges. The concrete bridge plans accepted included those of William Fowler, Lars Hansen and Chapin A. Day.²⁶

An inexpensive pool of construction labor was found by the county in 1911 when in June the State Road Commission authorized commencement of road work in Box Elder County using convict labor from the state prison.²⁷ The work they were to carry out included road construction of the highway between Brigham City and Hot Springs, as well as a concrete retaining wall and two concrete bridges in Box Elder Canyon.²⁸ This construction was to be the first in Utah to be carried out under new state legislation authorizing the use of convict labor for the construction and improvement of state roads.²⁹ Though a newspaper article in July indicated that the prisoners, who were quartered in a camp near Willard, would soon be undertaking work on the two bridges, this construction was apparently never carried out.³⁰ The prisoners were returned to the penitentiary in early November before the Box Elder Canyon work was begun.³¹ Nevertheless, some of the Box Elder Canyon work was completed that fall. After the prisoners left, Road Commissioner P. N. Pierce apparently hired a "strong corps of [local] men" to complete work on the concrete retaining wall in the canyon.³² No mention was made of bridge work at that time.

On April 9, 1912, the road bond election which failed in 1911 was held again to secure a \$175,000 bond for continued bridge and road work in the county.³³ This bond included \$2,000 for construction of "two cement arches in Box Elder Canyon".³⁴ The bond issue passed and the bonds were sold,³⁵ but it was several months before the money was available to fund the two concrete bridges in the canyon. Work on the bridges was expected to begin in mid to late August,³⁶ but probably did not start until a month or two later. Road Commissioner Pierce apparently obtained construction labor from local farms, but did not hire the labor until after crop harvesting was complete.³⁷ Construction of the bridges was complete by mid November when Pierce took Mr. Ulrich, a member of the State Road Commission, on a tour of recently completed construction projects in the canyon and elsewhere.³⁸

III. THE BRIDGE

A. DESCRIPTION

This small, eighty-year-old arch bridge structure, oriented generally east to west, spans the course of a former channel of the South Fork of Box Elder Creek.³⁹ The bridge was built as a simple, reinforced concrete closed spandrel single arch bridge with a deck measuring 21 feet 2 inches long and 17 feet 4 inches wide.

In plan the bridge is shaped like a parallelogram with four flared retaining walls (abutments) holding back the earthen embankment and road from slipping into the creek. Three of the four retaining walls flare out from the bridge at widely obtuse angles. An exception is the southwest wall which turns away from the road at a 90 degree angle.

Looking at either side of the bridge, the present ruined structure gives the appearance of a large culvert connected by a concrete archway running parallel to the river. This is because both of the concrete railing walls have been destroyed.

The north side of the bridge is no longer flanked by a bank, so there is no retaining wall there. Instead, the only visible bridge elements are the arch of poured concrete and the exposed vertical reinforcing bars. The arch appears to have been constructed in two separate pours. The first, lower pour is about 6 3/4 inches thick. The second, or upper pour, is about 8 inches thick. Because there is much concrete debris and silting under the arch, the north side of the bridge is only 2 feet 6 inches high. The south side is 4 feet 9 inches high, which is probably close to the original height from streambed to the bottom of the arch opening.

The south side of the bridge has parts of the original sidewall and abutments still intact. A long 17-foot 4-inch concrete retaining wall extends at a 104 degree angle upstream from the arch bridge along the bank of the former creek channel. At the upper end of this wall there is a mortared rock retaining wall extension to the original concrete retaining wall. The extension measures 10 feet long. The southwest flaring concrete abutment is 20 feet 1 inch long.

There are few significant architectural details visible on the bridge itself. There are no bridge numbers or other indicators of the date of construction or builder. However, a few items were noted. The form marks on the underside of the arch indicates that 4 inch wide boards were used to contain the concrete during the first pour. Also, several exposed reinforcing rods which were used to strengthen the concrete were observed at the base of the old railings. These rods are 3/8 inch thick and smooth rather than ribbed. In a few locations on the railing base smooth, two-strand twisted wire fragments were found protruding from the concrete. Presumably these were also used as reinforcing elements in the concrete.

Using a 1913 photograph of the bridge, it was possible to also describe the railings or parapets. They were made of concrete and appear to have been formed from two or more separate pours, as part of the retaining walls and the arch. They were of

quite simple construction with smooth sides accented by incised lines formed into large rectangular designs on the interior railing walls. The parapets were topped by a simple rounded protective concrete cap feature.

The bridge was built in 1912, making it one of the earliest representatives of reinforced concrete bridge construction in Utah. Perhaps due to the fact that it was designed during the infancy of reinforced concrete construction, it is quite simple and plain in design. Nevertheless, it was well-built and, despite its ruined railings, still appears in quite sound condition.

B. OWNERSHIP AND FUTURE

From the limited information available about construction and ownership of the bridge, it appears that the major portion of the cost of the bridge was borne by Box Elder County through the bond election passed in 1912. The State Road Commission also helped, at least through the services of Road Commissioner P. N. Pierce who apparently supervised the construction work. It is likely that the bridge became the property of the state of Utah after construction because the Box Elder-Sardine Canyon road was part of the core network of state roads designated in 1909.

It appears that the arch bridge was abandoned in the late 1920s to be replaced by an adjacent structure. The channel of the South Fork of Box Elder Creek was altered to flow under the new structure and the road rerouted over it. In 1952 this structure too was abandoned and yet another channel change was made and a new road alignment and culvert were built further south. This 1952 alignment is still used today.

The arch bridge structure has been largely unaffected through all of these changes, though some vandalism has occurred to the structure as evidenced by the broken parapets. Ownership of the structure, however, appears to have changed at some point in the past. Currently, the structure and some of the surrounding land is owned by Wasatch-Cache National Forest. When the Forest Service acquired the land is not known, though it may have occurred when the road alignment significantly changed in 1952.

The arch bridge is now scheduled to be removed to allow realignment of the highway through the area. The Utah Department of Transportation is currently negotiating the purchase of the property from the U.S. Forest Service to complete the work. The Federal Highway Administration's "Determination of Eligibility and Finding of Effect" for SR-91, Brigham to Wellsville Highway Project established that the bridge would be adversely affected by the construction alternative currently proposed for the project.⁴⁰ Preservation of the Box Elder Creek Arch Bridge through HAER documentation was jointly agreed to by the Federal Highway Administration, Utah State Historic Preservation Office and the Advisory Council of Historic Preservation in an executed Memorandum of Agreement.

IV. BRIDGE BIOGRAPHICAL MATERIAL

A. ENGINEERING AND DESIGN

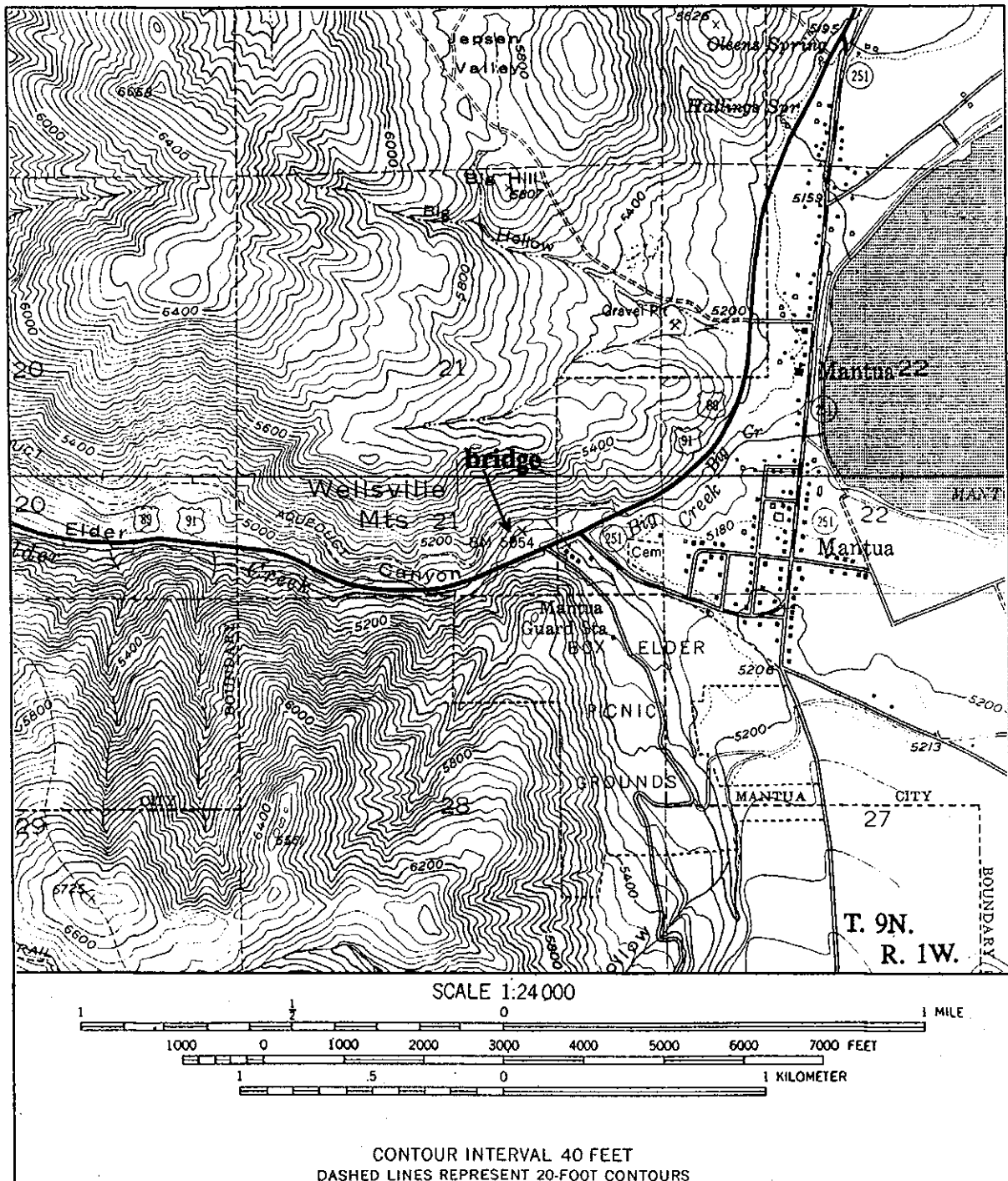
No design sheets or other descriptions of the bridge are known to exist, though it is known to be the one remaining bridge of several almost identical structures built in the canyon in 1911 and 1912.⁴¹ It is possible that many small bridges constructed in Box Elder County during this era were built using standard plans, a common practice at the time. Box Elder County purchased bridge plans from the James J. Burke Company of Salt Lake City in late August 1912. These plans may have been used in construction of the arch bridges in Box Elder Canyon, although there is no direct evidence of such use.⁴²

B. BRIDGE BUILDER

From the fragmentary evidence available concerning the construction of the Box Elder Creek Arch Bridge, it appears that County Road Commissioner Peter Nelson Pierce was in charge of construction and that he used locally available labor to complete the work.⁴³ Pierce worked under the authority of the Box Elder County Commissioners.

Pierce was a prominent individual in Box Elder County history. He was born April 7, 1865 in Sweden and was brought to the United States in 1866 by his parents. His father died enroute to Utah. As a youth and young adult Pierce held jobs in railroad-ing, farming, cattle raising and dry farming.⁴⁴

Pierce was the first fire chief of Brigham City and was chief of police in Brigham City for several years. In the early part of this century he was Box Elder County Road Commissioner. In this position he supervised construction of the first concrete road in the county which was also the first concrete road built in the state of Utah.⁴⁵ This road project between Garland and Tremonton was authorized by the State Road Commission in May 1912, prompted by an Ogden Portland Cement Company offer to provide concrete for the project at no charge.⁴⁶ Pierce's experience with concrete on this road probably prompted the County Commissioners to charge him with supervision of the concrete bridge construction in Box Elder Canyon.



Location of Arch Bridge. Taken from: USGS Mount Pisgah (1955; P.R. 1969) and Mantua (1955; P.R. 1969 and 1975), Utah 7.5' Quadrangles.

On the following page is a historic photograph of the Box Elder Creek Arch Bridge in upper Box Elder Canyon. View is to the northeast. Photographed by A.W. Compton for the Ogden Portland Cement Company, 1913. Photograph: Compton #1913:253 from Compton Archives, Special Collections, Utah State University, Logan, Utah.



V. ENDNOTES

1. Dale L. Morgan, *Jedediah Smith and the Opening of the West*, Lincoln: University of Nebraska Press, 1964, p. 411.
2. Milton R. Hunter, *Beneath Ben Lomond's Peak: A History of Weber County 1824-1900*, Salt Lake City: Deseret News Press, 1944, p. 49.
3. Howard Stansbury, *Explanation and Survey of the Valley of the Great Salt Lake of Utah, Including a Reconnaissance of a New Route through the Rocky Mountains*, Philadelphia: Lippincott, Grambo and Company, 1852, p. 96.
4. Archie Sims, *Early History of Mantua*, Undergraduate seminar paper, Department of History, Utah State Agricultural College, Logan, 1935, p. 1. Manuscript on file, Utah State University Library, Special Collections.
5. Joel E. Ricks, *The Beginnings of Settlement in Cache Valley*, 12th Annual Faculty Research Lecture, The Faculty Association, Utah State Agricultural College, Logan, 1953, p. 8; Rex J. Haddock, *A History of Cache Valley, Utah, from the Fur Period to the Year 1869*, Master's Thesis, Department of History, Utah State Agricultural College, Logan, 1953, p. 18.
6. Kate B. Carter, *Journal of Mary Ann Weston Maughan*, Daughters of Utah Pioneers, Lesson for February, 1959, p. 383.
7. Ezra C. Knowlton, *History of Highway Development in Utah*, Salt Lake City: Utah State Road Commission, 1964, pp. 67-68.
8. Cache County Deed Book A, County Recorder's Office, Cache County, Logan, Utah, pp. 81, 83.
9. Ezra C. Knowlton, *History of Highway Development in Utah*, pp. 78, 84.
10. Lydia Walker Forsgren, *History of Box Elder County*, Salt Lake City: Daughters of Utah Pioneers, 1937, p. 285.
11. Dr. William Peterson, *History of Roads and Freightage in Cache Valley*, Lecture given to Cache Valley Chapter, Utah State Historical Society, Logan, 1953, p. 4. Manuscript on file at Utah State University Special Collections.
12. Ezra C. Knowlton, *History of Highway Development in Utah*, pp. 122-123.
13. *Ibid.*, pp. 146-147.
14. U.S. Department of Transportation, *Bridge Inspector's Manual 70*, Washington, D.C.: Federal Highway Administration, 1979, pp. 2-5.
15. *The Box Elder Journal*, "Vote the Bonds Next Tuesday, April 9", 4 April 1912, p. 1, col. 1.

16. Ibid., "Box Elder Creek on the Rampage", 2 February 1911, p. 1, cols. 1 and 2; *The Box Elder News*, "The Washout", 2 February 1911, p. 1, col. 1.
17. Box Elder County Commissioners, Minutes for the Year 1911, 6 February.
18. *The Box Elder Journal*, "Vote the Bonds Next Tuesday April 9", 4 April 1912, p. 1, col. 5.
19. Ibid., "Commissioners Meet", 23 March 1911, p. 8, col. 4.
20. Lydia Walker Forsgren, *History of Box Elder County*, p. 130.
21. *The Box Elder Journal*, "Work Progressing on Roads in the County", 21 November 1912, p. 1, col. 3.
22. Ibid., "Vote the Bonds Next Tuesday April 9", 4 April 1912, p. 1, col. 5.
23. Ibid., 4 April.
24. *The Box Elder Journal*, "Commissioners Busy", 4 May 1911, p. 1, col. 3.
25. *The Box Elder Journal*, "Commissioners Meet", 23 March 1911, p. 8, col. 4; *The Box Elder Journal*, 5 November 1911, p. 1, col. 2; *The Box Elder Journal*, "County Commissioners Notes", 5 October 1911, p. 1, col. 2.
26. Box Elder County Commissioners, Minutes for the year 1911, 6 March and 20 March.
27. State Road Commission Minutes, 6 June 1911, p. 30.
28. *The Box Elder News*, "Convicts to Labor in Box Elder", 15 June 1911, p. 1, col. 4; *The Box Elder Journal*, "Convict Labor for Box Elder County Roads", 15 June 1911, p. 1, col. 6.
29. State Road Commission, Second Biennial Report 1911-1912.
30. *The Box Elder News*, "Convicts Soon to Get Busy", 13 July 1911, p. 1, col. 3.
31. *The Box Elder Journal*, "Convicts Taken Back to Penitentiary", 16 November 1911, p. 1.
32. Ibid., "State Road is Progressing", 23 November 1911, p. 1, col. 7.
33. Ibid., "Vote the Bonds Next Tuesday April 9", 4 April 1912, p. 1, col. 5.
34. Ibid., "Notice of County Bond Election", April 4, 1912, p. 4, col. 6.
35. Ibid., "County Road Bonds are Sold at Par", May 16, 1912, p. 1, cols. 1 and 2.
36. Ibid., "Extensive Road Improvements Underway", 8 August 1912, p. 1, col. 1.

37. Ibid.
38. Ibid., "Work Progressing on Roads in the County", 21 November 1912, p. 1, col. 3.
39. Portions of this description come from the original recordation effort on this bridge in 1989: Michael R. Polk and Allen Roberts, *A Cultural Resources Survey of Box Elder Canyon and Portions of Mantua, Box Elder County, Utah*, Ogden, Utah: Sagebrush Archaeological Consultants, Archaeological Report No. 308, 1989.
40. Federal Highway Administration, Utah Division, *Determination of Eligibility and Finding of Effect for Project No. F-017(18); SR-91, Brigham to Wellsville*, 1989.
41. Photographs of three separate concrete arch bridges taken in 1913 by photographer A. W. Compton for the Ogden Portland Cement Company were found at the Special Collections Library at Utah State University in Logan. One of the photographs was of the bridge under consideration here. Another was presumably of the other bridge built under the supervision of P. N. Pierce. The last is said to be the bridge at the mouth of the canyon which is known to have been built by the Wheelwright Construction Company in 1911.
42. *The Box Elder Journal*, "County Commissioners Contract for Bridges", 29 August 1912, p. 1, col. 3.
43. Ibid., "Extensive Road Improvements Underway", 8 August 1912, p. 1, col. 1.
44. *The Salt Lake Tribune*, "Pioneer Fire Chief Dies at Brigham City", 3 August 1936, p. 9, col. 7.
45. Ibid.; Lydia Walker Forsgren, *History of Box Elder County*, p. 376.
46. State Road Commission Minutes, 2 December 1912, 4 May 1916, vol. 2, 18 May 1912, p. 4 and 5.

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D. HISTORIC PHOTOGRAPHS

A. W. Compton, Photographer. View of Box Elder Creek Arch Bridge in upper Box Elder Canyon; view to the northeast. Located in Compton Archives, Special Collections, Utah State University, Logan. Photograph: Compton #1913:253.

A. W. Compton, Photographer. Photographs of three separate concrete arch bridges taken in 1913 for the Ogden Portland Cement Company. Located in Special Collections Library at Utah State University in Logan.